

CATSUP— The large fruit canning establishment of Collins & Co. at Labanon, near Camden, is now running day and night in manufacturing *sixty thousand gallons* of catsup for parties in Philadelphia and New York, at one dollar per gallon. The tomatoes from which this immense quantity is to be made were bought during the season and placed in immense vats, five in number, where they have been kept until fermentation was effected, and are now being put through the other processes of boiling, squeezing through sieves, peppering, &c. This, when we reflect that it will be 500 hogsheads of this red-hot condiment, ought to be enough to parch the palates of all humanity.

— *Smyrna Times*
November 19, 1873

CHAPTER 1

INTRODUCTION

CATSUP TODAY hardly qualifies for the superlatives lavished upon it by the *Smyrna Times* correspondent. Modern catsup is neither hot nor fermented, but it comes in bottles strikingly similar to those used by the Collins cannery more than a century ago. Both taste and processing methods have changed during the intervening generations, while the name and the package have remained static.

It is not sufficient to state the name of something and assume that the name has the same meaning to all readers, at all times. Catsup has changed, as the recipes on page 8 will show. So has food preservation technology.

In the nineteenth century, a cannery was a place where cans were made and filled with locally-grown products. Can filling was a seasonal business, but can making was a year-round job. Cannery managers were more likely to be tinsmiths than food experts, and profits were extremely high. The seasonal labor force consisted largely of young ladies, who lived during the season on the grounds in a [properly chaperoned] dormitory on the property. The year-round force were can-makers, who worked during the harvest season closing the cans they had manufactured during the winter.



PLATE 1

Aerial view of the Lebanon cannery site, from the southwest before construction of the new Road 356a. The duplex apartment house, at extreme right, stands on the south end of the cannery site. Photo by Tim O'Brien, 1987

Around 1900, can manufacture became a separate business; canners began buying their cans ready-made, eliminating the need to maintain a year-round factory. During the first decade of the twentieth century, canneries changed. They were no longer year-round operations; only a maintenance crew remained on the site over the winter. There was no longer any need for weather-tight factory buildings, and canneries could be built more cheaply without can shops.

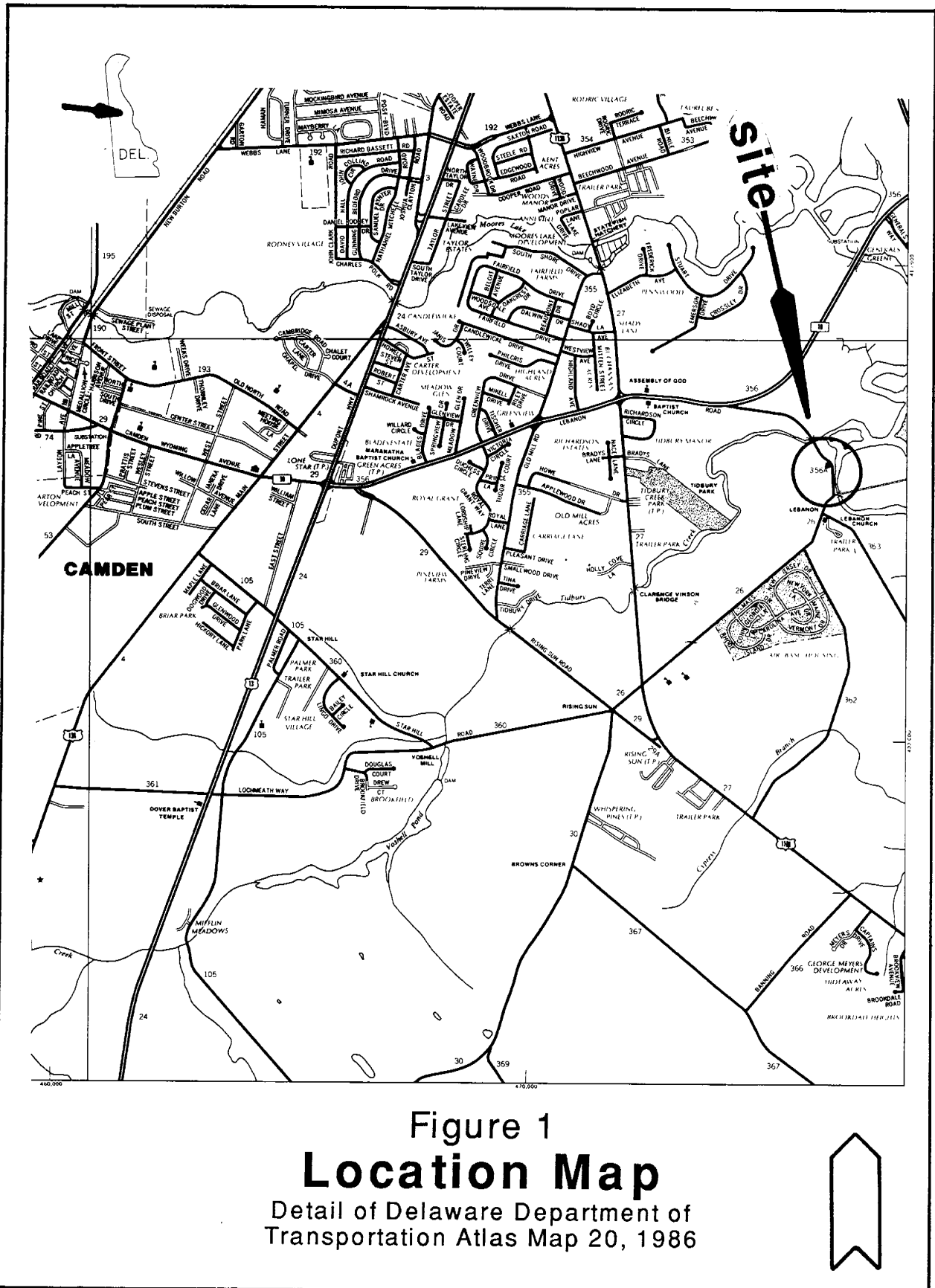




PLATE 2

Aerial view of the Lebanon cannery site, from the southeast, after construction of the new Road 356a. The causeway, in foreground, is now connected by a footbridge that replaced the iron swing bridge. Photo by Tim O'Brien, 1989.

These country canneries, established during the first quarter of the twentieth century, represented a second growth period in Delmarva canning, which ended with hard economic times, the introduction of frozen food technology, industry consolidation, and stricter government regulation. The canner's economic niche is now filled by freezer plants or a combination of freezing and canning.

Today's canning plants run year-round, sometimes bringing frozen product from great distances to keep the lines running. They often are managed by people with advanced degrees in engineering and food

sciences. The modern cannery may provide housing for seasonal field or production workers, but today's workers come from different backgrounds and require different accommodations.

The Collins, Geddes cannery site at Lebanon provides a laboratory in which to study the changes in canneries over the past century. It was not unique, even though it once was called the biggest in the world. A much more elegant cannery building of the same era, Richardson and Robbins, survives in nearby Dover, but it has been gutted and converted into offices for state agencies. Nearly every Delaware town had a cannery as recently as the third decade of the present century; several are still standing, a few still in use.

What sets the Lebanon cannery apart archaeologically is the fact that it operated for a short time and then closed, the site being left vacant and relatively undisturbed for a century. Most of the other canneries remained in business and gradually changed to meet new conditions, or were rebuilt as technology changed. The Lebanon cannery, on the other hand, is an undisturbed site from a very short time period, with informational value of a "sealed context" in conventional archaeological terminology. Even after part of the cannery was destroyed by the present project, a significant fraction of the original cannery site remains undisturbed.

Purpose and Location of the Project

Road 356a is a small secondary route, connecting the hamlet of Lebanon with Route 10 on the west bank of St. Jones River. The road follows the river and crosses Tidbury Branch on a single lane bridge built around 1925. Dover Air Force Base is located on the east bank of the river, at the eastern end of Route 10. A few years ago, the Air Force built a housing complex at Lebanon, to serve Dover Air Force Base personnel. As a result, Road 356a received considerable commuter traffic.

The old road could not absorb the new load. Commuters were forced to wait at the one-lane bridge, or dodge the fishermen who lined the narrow causeway. The road's hairpin curves claimed their share of vehicles, some of which ran into the river. A new bridge, with straighter and wider approaches, was designed and has now been built.

In response to Section 106 of the Historic Preservation Act of 1966 as amended, the Division of Highways engaged the firm of Heite Consulting to conduct Phase I and Phase II surveys during 1988; the report of these studies was published as number 70 in the present series. Based upon that report, the State Historic Preservation Officer determined that the cannery site is eligible for listing in the National Register of Historic Places. The Phase III data recovery undertaking reported here was conducted in response to recommendations included in that report.

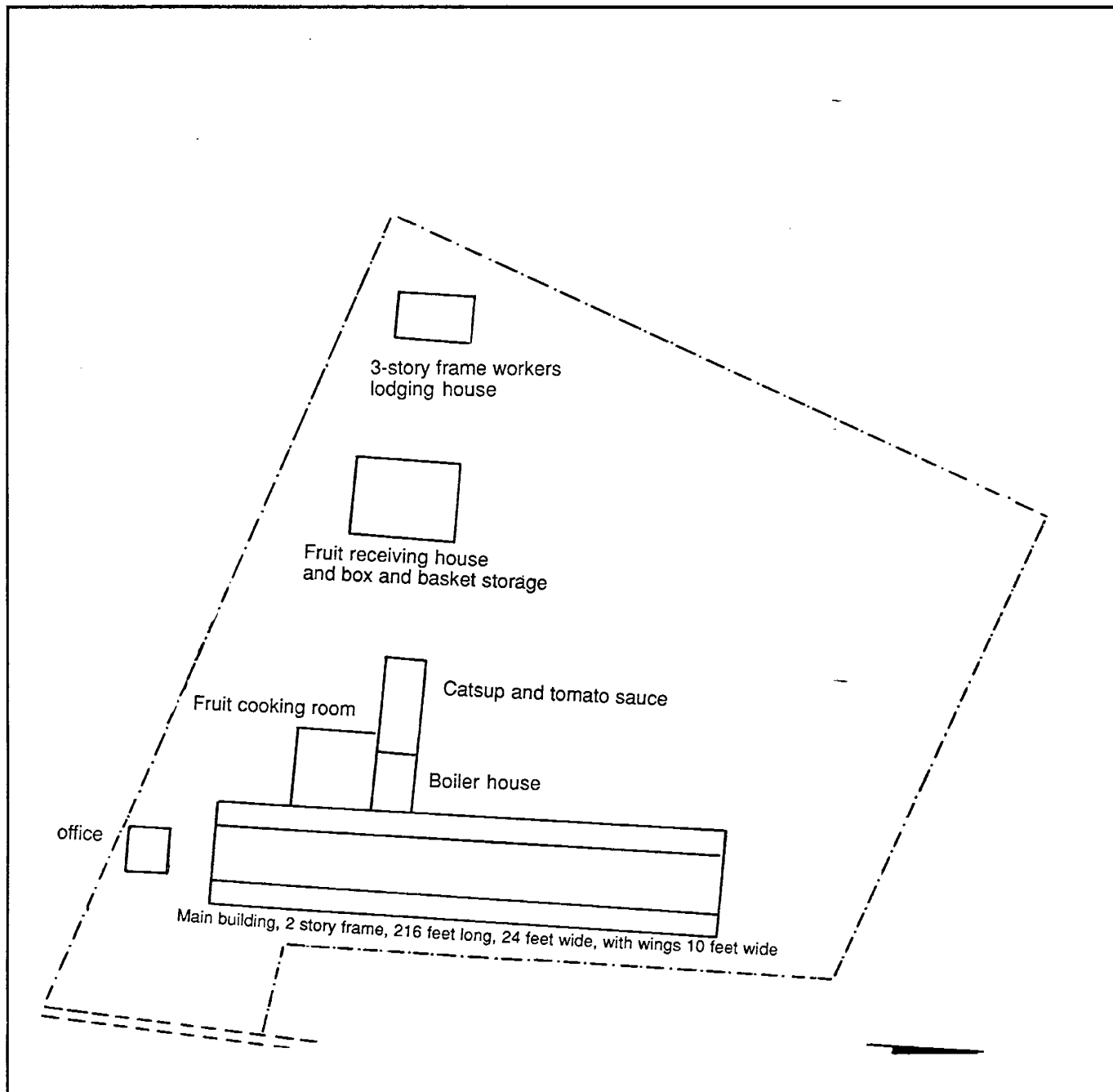


Figure 2

Reconstructed ground plan of the 1874 form of the John S. Collins and Company cannery, derived from Kent County Mutual insurance declarations by Dr. E. D. Bryan of Dover. No actual ground plan is known to exist.

Historical Synopsis

The Collins, Geddes cannery was finished and operational in 1870, and soon began to expand. The two-story main building grew from 80 feet long to 216 feet before it was destroyed by fire in December 1874. The property, by then solely owned by John S. Collins, was rebuilt on a smaller scale. The sheriff sold the plant in 1878 to a New York grocer associated with the large Thurber organization, William Paschall, who in turn sold it to an oilman from Wisconsin, William Eastman Cotter of Philadelphia.

Cotter also bought the Little Creek Cannery in 1881 and operated it in partnership with his father-in-law, James Laws Heverin. There is reason to believe that the machinery was removed to Little Creek after the 1882 season. The Lebanon plant burned again in 1884 and was never rebuilt. The Little Creek cannery burned in 1885. Rumors circulated about the insurance Cotter collected, and the cause of the fire.

Research objectives and methods

The State Plan for Historic Preservation (Ames, Callahan, Herman, and Siders 1989) defines the cannery's active period as "industrialization and early urbanization" period, 1830-1880, when "industry played a major role in changing the Piedmont Zone landscape" and "the Upper Peninsula Zone was redefined as the Wilmington backcountry." These statements are misleading, since they do not take into consideration the historical facts relating to Kent County. Planning implications are discussed in chapter 9, below.

Canning, second largest manufacturing industry in the state after shipbuilding, played a major role in changing the landscape of the Upper Peninsula Zone, of which North Murderkill Hundred is a part. During the period, this zone remained in the economic and social hinterland of Philadelphia, as it had been for two centuries. The period of Wilmington's commercial dominance did not begin until after the duPont Highway was built in the years following 1916. Canning in Delaware can be understood only in terms of the world markets it reached through the region's direct intercourse via Philadelphia and Baltimore.

Phase I investigations indicated that the bridge project probably would destroy part of the site of the original cannery building, but that most of the complex would be spared. A map compiled by Dr. E. D. Bryan of Dover (FIGURE 2) from insurance declarations projected that the north end of the first main cannery building stood on this location.

A Dover Catsup Recipe, 1883:

Makes a half gallon

(from the Cowgill Cook Book, reprinted by the Delaware State Museum)

one gallon skinned tomatoes
four tablespoonfuls of salt
four tablespoonfuls of black pepper
half spoonful of allspice
eight pods of red pepper
eight tablespoonfuls of mustard
one pint of sharp vinegar

Simmer the ingredients three or four hours, then strain through a wire sieve, and bottle closely. A little olive oil on top of the catsup will keep it from moulding.

Modern Catsup Recipe:

Makes 2 pints

(*Better Homes and Gardens* Canning and Freezing Vegetables "Complete Tear-Out Guide" n.d.)

1 1/2 teaspoons whole cloves
1 1/2 inches stick cinnamon, broken
1 teaspoon celery seed
1 cup white vinegar
8 pounds (25) medium tomatoes
1 medium onion, chopped
1/4 teaspoon cayenne
1 cup sugar
4 teaspoons salt

In small saucepan, combine cloves, cinnamon, celery seed, and vinegar. Cover; bring to boiling. Remove from heat; let stand. Wash, remove stem ends, and quarter tomatoes into large kettle. Add onion and cayenne. Bring to boiling; cook 15 minutes, stirring occasionally. Drain off excess liquid. Put tomatoes through food mill or coarse sieve. Add sugar to juice; bring to boiling. Simmer briskly 1 1/2 to two hours or till reduced by half (measure depth with ruler at start and end). Strain spiced mixture into tomato mixture; discard spices. Add salt. Simmer about 30 minutes or to desired consistency, stirring often. Ladle into hot pint jars, leaving 1/2 inch headspace. Adjust lids. Process in boiling water bath 5 minutes (start counting time when water returns to boiling). Makes 2 pints.



Plate 3

Engraving of the canning plant of the Farmer's Fruit Preserving Company at Rising Sun, "near Lebanon, Del.," owned by local farmers. The builder, Jacob Brown, was the managing partner of the Lebanon cannery. Partners in this Rising Sun company operated the Lebanon steamboat service.

Among the remains on the site were many fragments of tinplate waste, some of it still shiny. It was demonstrated during the original survey that the can waste could provide significant insights into the manufacture of tin cans. The first objective of the present project was to document any elements of the site that might be destroyed by construction. A second objective was to recover a larger sample of can-making waste. Finally, this report is intended to provide a theoretical, technological, and historical background for future cannery investigations in Delaware, which inevitably will be necessary.

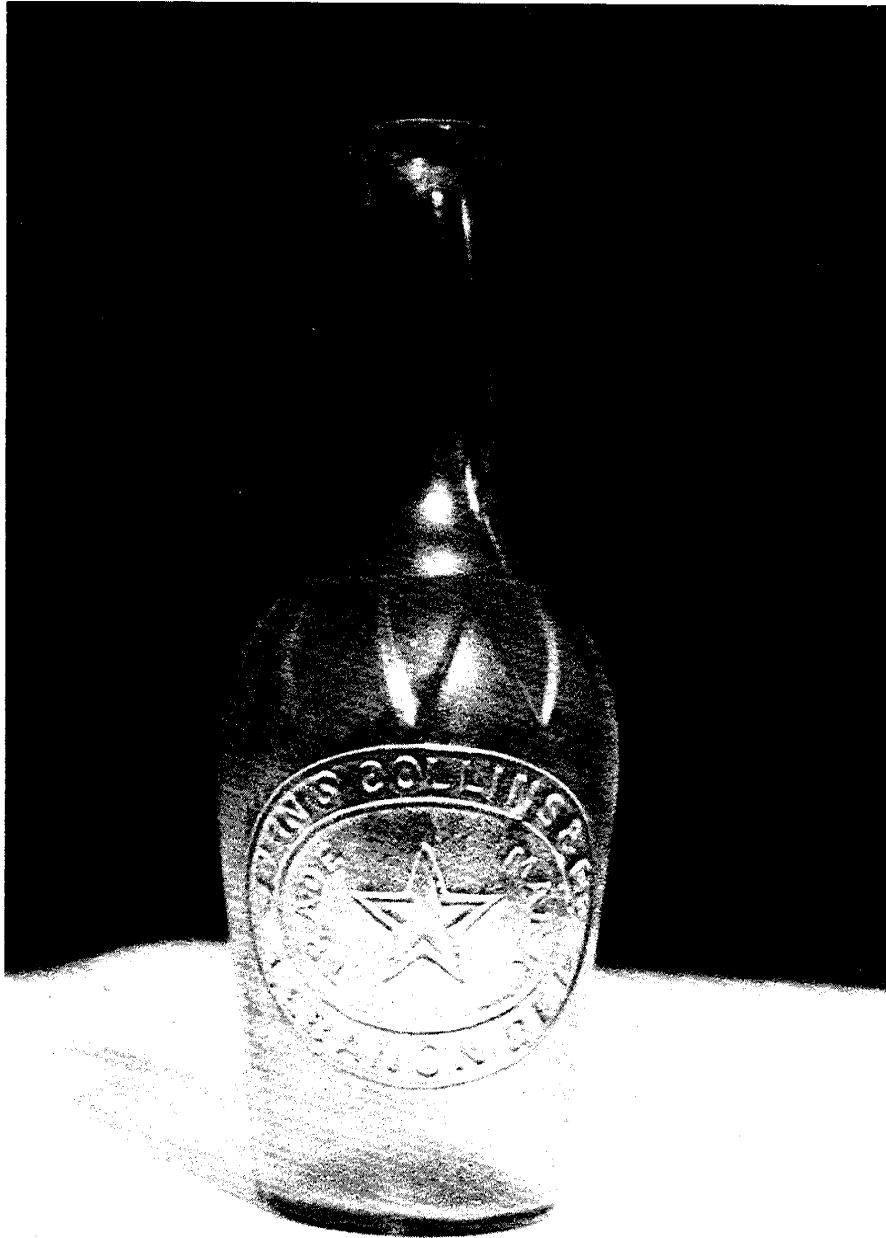


Plate 4

Catsup bottle from the Lebanon company, exhibiting the name of the firm as it existed between 1872 and 1874. The traditional bottle style is little changed today, but the recipe has changed. These bottles probably were made in New Jersey and shipped across the bay in a schooner to Lebanon wharf. Loaned by Dr. E. D. Bryan.

Archæological literature of Delaware canneries is sparse. Dr. E. D. Bryan has amassed considerable primary data on the subject, which he has interpreted for museum purposes and deposited with the Delaware State Museum. One other Delaware cannery site was archæologically reported simultaneously with the first part of this project (Coleman, Hoseth, Custer and Jagers 1988). Dr. Bryan's comprehensive list of Delaware canneries is reproduced as an appendix to this report, and his illustrations have been used throughout.

A number of constraints were taken into account when designing the project. The entire site had been cultivated after the cannery was removed, destroying any contexts that might have existed in the top foot of soil. On the south, a septic tank serving the duplex apartment house was situated in the middle of a proposed cut. The north part of the cannery site, which was to suffer the greatest damage, was covered by second-growth trees and recent trash accumulated since the field was abandoned about thirty years ago.

Since most of the anticipated remains were shallow foundations surviving in the few inches of subsoil just below plow depth, it was deemed imprudent to knock down the trees with a machine in preparation for archæology. The strategy chosen was designed to capture the architectural data by using machines for the heavy digging, but avoid uprooting the stumps. The site was dug in patches, to avoid jerking out the roots and destroying the shallow footings entwined in them. A rubber-tired front loader would visit the site, clear the plowsoil from an area, and leave it for archæological recordation. Given the uncertainty of winter weather and difficulties in scheduling machine time for short jobs, such a piecemeal approach is normally an excessively expensive and time-consuming way to dig a site. But it was possible in this instance because of unusual logistical circumstances. Both the investigator's home and the backhoe's headquarters were very near the site. The result was a more leisurely examination of features than normally is possible on a salvage excavation.

The excavation register from the 1988 Phase I-II survey was continued (APPENDIX 1); the catalogue and interpretation in this volume treats both seasons' work as a single investigation, even though figure numbers in the present volume are restarted and some material from the earlier volume is repeated here.